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Substitute for form 1449A/PTO				Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/307,223		
				Filing Date	May 7, 1999		
				First Named Inventor	Judith A. Varner		
				Group Art Unit	NYA		
				Examiner Name	NYA		
Sheet	1	of	6	Attorney Docket Number	6627-PA11		
U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code ² (if known)				
	A1	US5753230		Brooks et al	05-19-98		
	A2	US5766591		Brooks et al.	06-16-98		
	A3	US5627263		Rouslahti et al.	05-06-97		
	A4	US5855866		Thorpe et al	01-05-99		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ³
		Office ⁴	Number ⁴ (if known)	Kind Code ⁵			
	B1		WO95/14714		LA JOLLA CANCER RESEARCH FOUNDATION	06-01-95	
	B2		WO97/10507		LA JOLLA CANCER RESEARCH FOUNDATION	03-20-97	
	B3		WO98/10795		LA JOLLA CANCER RESEARCH FOUNDATION	03-19-98	
	B4		WO99/13329		LA JOLLA CANCER RESEARCH FOUNDATION	03-18-99	
	B5		EP0906919A2		LA JOLLA CANCER RESEARCH FOUNDATION	04-07-99	
Examiner Signature				Date Considered			

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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent documents.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	C1	AOTA, S., NOMIZU, M., and Yamada, K.M. 1994. The short amino acid sequence Pro-His-Ser-Arg-Asn in human fibronectin enhances cell-adhesive function. J. Biol. Chem. 269: 24755-24761.			
	C2	ARAP W et al. 1997. Cancer treatment by targeted drug delivery to tumor vasculature in a mouse model. Science 279: 377-380.			
	C3	BADER, B.L. et al. 1998. Extensive vasculogenesis, angiogenesis, and organogenesis precede lethality in mice lacking all α_v integrins. Cell 95: 507-519.			
	C4	BLÖCH, W. et al. 1997. β_1 integrin is essential for teratoma growth and angiogenesis. J. Cell Biol. 139: 265-278.			
	C5	BLYSTONE, S.D. et al. 1994. Integrin $\alpha_v\beta_3$ differentially regulates adhesive and phagocytic functions of the fibronectin receptor $\alpha_5\beta_1$. J. Cell Biol. 127: 1129-1137.			
	C6	BROOKS, P.C. et al. 1994a. Requirement of vascular integrin alpha v beta 3 for angiogenesis. Science 264: 569-571.			
	C7	BROOKS, P.C. et al. 1994b. Integrin alpha v beta 3 antagonists promote tumor regression by inducing apoptosis of angiogenic blood vessels. Cell 79:1157-1164.			
	C8	BROOKS, P.C., et al. 1995. Anti-integrin alpha v beta 3 blocks human breast cancer growth and angiogenesis in human skin. J. Clin. Invest. 96: 1815-1822.			
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	C9	CARRON, C.P. et al. 1998. A peptidomimetic antagonist of the integrin $\alpha v \beta 3$ inhibits Leydig cell tumor growth and development of hypercalcemia of malignancy. Cancer Res. 58: 1930-1955.			
	C10	CASTELLANI, P. et al. 1994. The fibronectin isoform containing the ED-B oncofetal domain: a marker of angiogenesis. Int. J. Cancer 59: 612-618.			
	C11	CHARO, IF et al. 1990. The vitronectin receptor alpha v beta 3 binds fibronectin and acts in concert with alpha 5 beta 1 in promoting cellular attachment and spreading on fibronectin. J. Cell Biol. 111: 2795-800.			
	C12	CHRISTOFIDOU-SOLOMIDOU, M. et al. 1997. Expression and function of endothelial cell αv integrin receptors in wound-induced human angiogenesis in human skin/SCID mice chimeras. Am. J. Path. 151: 975-983.			
	C13	CLARK, R.A.F. et al. 1982. Blood vessel fibronectin increases in conjunction with endothelial cell proliferation and capillary ingrowth during wound healing. J. Invest. Dermatol. 79: 269-276.			
	C14	CLARK, R.A.F. et al. 1996. Transient functional expression of $\alpha v \beta 3$ on vascular cells during wound repair. Am. J. Path. 148: 1407-1421.			
	C15	COLLO, G. and Pepper, M.S. 1999. Endothelial cell integrin $\alpha 5 \beta 1$ expression is modulated by cytokines and during migration in vitro. J. Cell Sci. 112: 569-578.			
	C16	DRAKE, C.J. et al. 1992. Antibodies to beta 1-integrins cause alterations of aortic vasculogenesis, in vivo. Dev. Dyn. 193: 83-91.			
	C17	DRAKE, C.J. et al. 1995. An antagonist of integrin $\alpha v \beta 3$ prevents maturation of blood vessels during embryonic neovascularization. J. Cell Science 108: 2655-2661.			
	C18	FRIEDLANDER, M. et al. 1995. Definition of two angiogenic pathways by distinct alpha v integrins. Science 270:1500-1502.			
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	C19	FRIEDLANDER M. et al. 1996. Involvement of integrin $\alpha v \beta 3$ and $\alpha v \beta 5$ in ocular neovascular diseases. Proc. Natl. Acad. Sci. 93: 9764-9769.				
	C20	GEORGE, E. L., et al. 1993. Defects in mesodermal migration and vascular development in fibronectin-deficient mice. Development 119: 1079-1091.				
	C21	GOH, K. L. et al. 1997. Mesodermal defects and cranial neural crest apoptosis in $\alpha 5$ integrin-null embryos. Development 124: 4309-4319.				
	C22	LAN, N. et al. 1998. Distinct signal transduction pathways are utilized during the tube formation and survival phases of in vitro angiogenesis. J. Cell Sci. 111: 3621-3631.				
	C23	KACZMAREK, J. et al. 1994. Distribution of oncofetal fibronectin isoforms in normal hyperplastic and neoplastic human breast tissues. Int. J. Cancer 58: 11-16.				
	C24	KOIVUNEN, E. et al. 1993. Selection of peptides binding to the $\alpha 5 \beta 1$ integrin from a phage display library. J. Biol. Chem. 268: 20205-20210.				
	C25	KOIVUNEN, E., Wang, B., Ruoslahti, E. 1994. Isolation of a highly specific ligand for the $\alpha 5 \beta 1$ integrin from a phage display library. J. Cell Biol. 124: 373-380.				
	C26	MAGNUSSON, M.K. and Mosher, D.F. 1998. Fibronectin: Structure, assembly, and cardiovascular implications. Arterioscler. Thromb. Vasc. Biol. 18: 1363-1370.				
	C27	NERI, D., Carnemolla, B., Nissim, A., Blaza, E., Leprini, A., Querze, G., Pina, A., Tari, L., Halin, C., Neri, P., Zardi, L. Winter, G. 1997. Targeting by affinity-matured recombinant antibody fragments of an angiogenesis associated fibronectin isoform, Nature Biotech. 15: 1271-1275.				
	C28	PIERSCHBACHER, M.D., Hayman, EG; and Ruoslahti, E. 1981. Location of the cell-attachment site in fibronectin with monoclonal antibodies and proteolytic fragments of the molecule. Cell 26: 259-67.				
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	C29	PYTELA, R. et al. 1985. Identification and isolation of a 140 kD cell surface glycoprotein with properties expected of a fibronectin receptor. Cell 40: 191-98.			
	C30	RUOSLAHTI, E. et al. 1981. Alignment of biologically active domains in the fibronectin molecule. J. Biol. Chem. 256:7277-81.			
	C31	SECHLER, J. L. and Schwartzbauer, J.E. 1998 Control of cell cycle progression by fibronectin matrix architecture. J. Biol. Chem. 273: 25533-25536.			
	C32	SENGER, D.R. et al. 1996. Stimulation of endothelial cell migration by vascular permeability factor/vascular endothelial growth factor through cooperative mechanisms involving the alpha v beta3 integrin, osteopontin, and thrombin. Am. J. Pathol. 149:1-7.			
	C33	SENGER, D. R. et al. 1997. Angiogenesis promoted by vascular endothelial growth factors: Regulation through $\alpha 1\beta 1$ and $\alpha 2\beta 1$ integrins. Proc. Nat'l Acad. Sci. USA 94: 13612-13617.			
	C34	SIMON, K.O. et al. 1997. The $\alpha v\beta 3$ integrin regulates $\alpha 5\beta 1$ -mediated cell migration toward fibronectin. J. Biol. Chem. 272: 29380-29389.			
	C35	STROMBLAD S., et al. 1996. Suppression of p53 activity and p21WAF1/CIP1 expression by vascular cell integrin $\alpha v\beta 3$ during angiogenesis. J Clin Invest 98: 426-433.			
	C36	STROMBLAD, S. and Cheresh, D. A. 1996. Integrins, angiogenesis and vascular cell survival. Chemistry and Biology 3: 881-885.			
	C37	SUEHIRO, K., GAILIT, J. and Plow, E.F. 1997. Fibrinogen is a ligand for integrin $\alpha 5\beta 1$ on endothelial cells. J. Biol. Chem. 272: 5360-5366.			
	C38	VARNER, J.A. 1997. The role of vascular cell integrin $\alpha v\beta 3$ and $\alpha v\beta 5$ in angiogenesis. <u>Regulation of Angiogenesis</u> (ed. by I.D. Goldberg & E.M. Rosen Birkhauser Verlag, Basel/Switzerland) Exs. 79: 361-390.			
	C39	VARNER, J.A. et al. 1995. Integrin $\alpha 5\beta 1$ expression negatively regulates cell growth: reversal by attachment to fibronectin. Mol. Biol. Cell 6: 725-740.			
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	C40	YANG, J.T., et al. 1993. Embryonic mesodermal defects in $\alpha 5$ integrin-deficient mice. Development 119: 1093-1105.			
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		Filing Date	May 7, 1999
		First Named Inventor	Vamer, Judith A.
		Art Unit	1642
		Examiner Name	S. Ungar
Sheet	1 of 1	Attorney Docket Number	021935-000110US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BC	Guo, Neng-hua, et al., "Thrombospondin 1 and Type I Repeat Peptides of Thrombospondin 1 Specifically Induce Apoptosis of Endothelial Cells", <i>Cancer Res.</i> , (1997), 57: 1735-1742	
	BD	Kim, Semi, et al., "Regulation of Angiogenesis in Vivo by Ligation of Integrin $\alpha_5\beta_1$ with the Central Cell-Binding Domain of Fibronectin", <i>American Journal of Pathology</i> , (2000), 156(4): 1345-1362	
	BE	Ruoslahti, Erkki, "Integrin Signaling and Matrix Assembly", <i>Tumor Biology</i> , (1996) 17(2):117-124	
	BF	Scott, Glynis, et al., "Fibronectin Suppresses Apoptosis in Normal Human Melanocytes Through an Integrin-Dependent Mechanism", <i>J. Invest. Dermatol.</i> , (1997) 108:147-153	
	BG	Yano, Yoshiko, et al., "Cyclic Strain Induces Reorganization of Integrin $\alpha_5\beta_1$ and $\alpha_5\beta_1$ in Human Vein Endothelial Cells", <i>Journal of Cellular Biochemistry</i> , (1997) 64(3):505-513	
	BH	Zhang, Zhuohua, et al. "The $\alpha_5\beta_1$ integrin supports survival of cells on fibronectin and up-regulates Bcl-2 expression", <i>Proc. Natl. Acad. Sci USA</i> , (1995) 92:6161-6165	
	BI		
	BJ		
	BK		
	BL		
	BM		

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